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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,756	06/27/2003	Andrew John Hutchinson	S01.12-0984	7343

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SEAGATE TECHNOLOGY LLC C/O WESTMAN
CHAMPLIN & KELLY, P.A.
SUITE 1400 - INTERNATIONAL CENTRE
900 SECOND AVENUE SOUTH
MINNEAPOLIS, MN 55402-3319

EXAMINER

RENNER, CRAIG A

ART UNIT	PAPER NUMBER
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2652

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/607,756

Applicant(s)

HUTCHINSON, ANDREW JOHN

Examiner

Craig A. Renner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
4a) Of the above claim(s) 11-14 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-7, 9, 10 and 15-23 is/are rejected.
7) ☒ Claim(s) 8 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 27 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 27 June 2003.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of "Group I" "claims 1-10 and 15-23" in the reply filed on 19 April 2005 is acknowledged. Accordingly, claims 11-14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to one or more non-elected inventions/species, there being no allowable generic or linking claim.

Drawings

2. The drawings are objected to because of the following informalities:

a. The drawings fail to comply with 37 CFR 1.84(p)(5) because they do not include one or more reference signs mentioned in the description. Note, for instance, "440" (disclosed as a "rigid load beam section" in line 8 on page 8, for instance).

b. The drawings also fail to comply with 37 CFR 1.84(p)(5) because they include one or more reference signs not mentioned in the description. Note, for instance, "340" (shown in FIG. 3, for instance), "354" (shown in FIG. 3, for instance), and "466" (shown in FIG. 4, for instance).

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being

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amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 9-10 and 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. In line 3 in each of claims 9 and 18, "the first and second side edges" are indefinite because they lack clear and/or positive antecedent basis.

b. In line 3 of claim 10, lines 2-3 of claim 19, and line 3 of claim 20, "the first side edge" is indefinite because it lacks clear and/or positive antecedent basis.

c. In line 4 of claim 10, lines 3-4 of claim 19, and line 4 of claim 20, "the second side edge" is indefinite because it lacks clear and/or positive antecedent basis.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-7 and 15-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Tangren (US 5,796,553).

With respect to claims 1-7, Tangren teaches a suspension (312) comprising a longitudinal axis; a proximal mounting section (adjacent unlabeled circular boss in FIGURE 5, for instance); a rigid load beam section (322); a flexible section (318) located between the proximal mounting section and the rigid load beam section (as shown in FIGURE 5, for instance), the flexible section having a preload bend ("spring region 318" would inherently have a preload bend); a peak strain region located between the preload bend and the rigid load beam section; and a damper (352 and/or 354) covering at least a portion of the peak strain region [as per claim 1]; wherein the peak strain region further includes a strain focusing aperture (350, for instance) [as per claim 2]; wherein the strain focusing aperture comprises an elongated slot (350), which extends transversely to the longitudinal axis and has first and second ends that are respectively spaced from first and second opposing side edges of the suspension (as shown in FIGURE 5, for instance) [as per claim 3]; wherein the strain focusing aperture concentrates strain energy in the peak strain region between the first end of the strain

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focusing aperture and the first side edge and between the second end of the strain focusing aperture and the second side edge (as shown in FIGURE 5, for instance) [as per claim 4]; wherein the damper covers a portion of the surface area of the suspension that is located between the first end of the strain focusing aperture and the first side edge and between the second end of the strain focusing aperture and the second side edge (as shown in FIGURE 5, for instance) [as per claim 5]; wherein the damper covers the strain focusing aperture (as shown in FIGURE 5, for instance) [as per claim 6]; and wherein the flexible section further includes a pair of spaced, elongated flexible struts (as shown in FIGURE 5, for instance, i.e., one strut is located between 334 and 350 and the other strut is located between 336 and 350) extending from the proximal mounting section toward the peak strain region (as shown in FIGURE 5, for instance), and wherein the preload bend is formed across the flexible struts (due to the fact that they are located in "spring region 318") [as per claim 7].

With respect to claims 15-22, Tangren teaches a suspension comprising a longitudinal axis; a proximal mounting section (adjacent unlabeled circular boss in FIGURE 5, for instance); a rigid load beam section (322); a flexible section (318) located between the proximal mounting section and the rigid load beam section (as shown in FIGURE 5, for instance) and comprising a preload bend ("spring region 318" would inherently have a preload bend); means (includes 350, for instance, in at least an equivalent structural sense) for concentrating peak strain energy in a peak strain region of the flexible section, between the preload bend and the rigid load beam section; and a damper (352 and/or 354) covering a portion of the peak strain region [as per claim 15];

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wherein the means for concentrating comprises an elongated planar region extending from the preload bend toward the rigid load beam section and defining the peak strain region (as shown in FIGURE 5, for instance) [as per claim 16]; wherein the means for concentrating further comprises a strain focusing aperture (350, for instance) in the peak strain region [as per claim 17]; wherein the strain focusing aperture comprises an elongated slot (350), which extends transversely to the longitudinal axis and has first and second ends that are spaced from the first and second side edges, respectively (as shown in FIGURE 5, for instance) [as per claim 18]; wherein the strain focusing aperture concentrates the peak strain energy between the first end of the strain focusing aperture and the first side edge and between the second end of the strain focusing aperture and the second side edge (as shown in FIGURE 5, for instance) [as per claim 19]; wherein the damper covers a portion of the surface area of the suspension that is located between the first end of the strain focusing aperture and the first side edge and between the second end of the strain focusing aperture and the second side edge (as shown in FIGURE 5, for instance) [as per claim 20]; wherein the damper covers the strain focusing aperture (as shown in FIGURE 5, for instance) [as per claim 21]; and wherein the flexible section further includes a pair of spaced, elongated flexible struts (as shown in FIGURE 5, for instance, i.e., one strut is located between 334 and 350 and the other strut is located between 336 and 350) extending from the proximal mounting section toward the peak strain region (as shown in FIGURE 5, for instance), and wherein the preload bend is formed across the flexible struts (due to the fact that they are located in "spring region 318") [as per claim 22].

With respect to claim 23, Tangren teaches a suspension (312) comprising a longitudinal axis; a proximal mounting section (adjacent unlabeled circular boss in FIGURE 5, for instance); a rigid load beam section (322); a flexible section (318) located between the proximal mounting section and the rigid load beam section (as shown in FIGURE 5, for instance), the flexible section having a preload bend ("spring region 318" would inherently have a preload bend); a peak strain region located between the preload bend and the rigid load beam section; a strain focusing aperture (350, for instance) located within the peak strain region; and a damper (352 and/or 354) covering at least a portion of the peak strain region (as shown in FIGURE 5, for instance).

Pertinent Prior Art

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. This includes Pal et al. (US 4,760,478), Grill et al. (US 5,963,397), Berding et al. (US 6,307,715), Hiraoka (US 6,704,164), Takagi et al. (US 6,798,618), Boutaghou et al. (US 2004/0061975), and Takekado (JP 01-248372), which each individually teaches a suspension configured to dampen a peak strain flexible region thereof.

Allowable Subject Matter

8. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base

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claim and any intervening claims. Claims 9-10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig A. Renner whose telephone number is (571) 272-7580. The examiner can normally be reached on Tuesday-Friday 9:00 AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Craig A. Renner
Primary Examiner
Art Unit 2652

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